




PATENT
TS1382 (US)
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William E. Hickman
Date: 1/8/08

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of)	
)	
Den Boestert et al)	
)	
Serial No. 10/825,484)	Group Art Unit: 1764
)	
Filed April 14, 2004)	Examiner: R. Boyer
)	
PROCESS TO SEPARATE COLOUR BODIES)	January 8, 2008
AND/OR ASPHALTENIC CONTAMINANTS FROM)	
<u>A HYDROCARBON MIXTURE</u>)	

COMMISSIONER FOR PATENTS
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicant hereby requests a pre-appeal brief conference.

Examiner's Rejection Mailed October 4, 2007

In the Office Action mailed October 4, 2007, the Examiner rejected Claim 1. Applicant respectfully traverses the rejection.

Pending Claims

Claims 1-16 are currently pending. Claim 1 is the only independent claim that will be discussed here and appealed. Claims 2-16 all depend from Claim 1. Claim 1 is presented here:

1. (Previously presented) A process for separating colour bodies and/or asphalthenic contaminants from a hydrocarbon mixture using a membrane having a feed side and a permeate side, by

contacting the hydrocarbon mixture with the feed side of the membrane, wherein between the feed side and permeate side of the membrane a pressure difference is applied, thereby passing part of the hydrocarbon mixture from the feed side to the permeate side and

obtaining at the permeate side of the membrane a hydrocarbon permeate having a reduced content of colour bodies and/or asphalthenic contaminants, and by removing the hydrocarbon permeate from the permeate side of the membrane,

wherein during selected time intervals the removal of hydrocarbon permeate from the permeate side of the membrane is stopped so that the pressure difference over the membrane is temporarily substantially lowered,

wherein during the process, a feed pressure level at the feed side is maintained at least as large as a permeate pressure level at the permeate side, so that the pressure difference is maintained at zero or greater. (emphasis added).

REMARKS

Claim 1 was rejected under 35 USC §102, as being anticipated by Moller (WO 01/10540 A2)("Moller").

Moller teaches a filtration system with a permeable membrane, which filters a fluid by applying a forward pressure differential from the retentate to the permeate for driving fluid through the membrane in a filtering direction. Moller also teaches periodically backwashing the membrane by applying a backwards pressure differential from the permeate to the retentate to clean the membrane. (Moller, Page 1, Lines 2-10).

Moller also teaches a flow resistance means for the permeate which can be used while applying a backwards pressure differential during the backwashing phase to reduce the backwards flow of permeate. (Moller, Page 6, Lines 9-14).

Applicants' independent claim 1, like Moller, is directed to a filtration system with a permeable membrane, which filters a fluid by applying a forward pressure differential from the retentate to the permeate for driving fluid through the membrane in a filtering direction. Applicants' independent claim 1 also includes stopping the removal of the permeate during selected time intervals, so that the forward pressure differential from the retentate to the permeate is temporarily substantially lowered, but always maintained at a level of zero or greater in order to prevent backwashing.

Applicants taught against the use of a backwashing operation in the U.S. Patent Application Publication Paragraphs 10 and 11, as taught by Moller. Applicants have developed a simpler process to maximize forward fluid flow from the retentate to the permeate without the use of backwashing.

Applicants respectfully submit that Moller does not teach or suggest the desirability of stopping the removal of the permeate during selected time intervals, so that the forward pressure differential from the retentate to the permeate is temporarily substantially lowered, while maintaining the pressure difference at zero or greater, as taught by Applicants' independent claim 1.

Claim 1 was also rejected under 35 USC §103(a), as being unpatentable over Cederlof (WO 03/035803)(Cederlof) in view of Moller, or vice versa.

Applicants respectfully submit that Cederlof does not remedy the defects of Moller discussed above, in that Cederlof also does not teach or suggest the desirability of maintaining the pressure difference at zero or greater. In addition, there would be no motivation to modify Moller with the teachings of Cederlof, as Moller teaches a backwashing operation which would not work if the pressure difference were maintained at zero or greater.

Lastly, Applicants respectfully submit that Cederlof does not qualify as prior art pursuant to 35 USC §103(c)(1), as both Cederlof and the present application have been the subject of ownership and assignment to "Shell Oil Company," from the time the earlier of the two inventions was made to the present day, and Cederlof is only prior art under 35 USC §102 (e), (f), or (g).

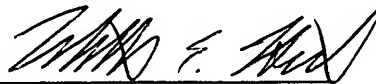
Applicants request that the Examiner withdraw the rejection to Claim 1.

Conclusion

It is respectfully submitted that the above amendments and remarks are sufficient to overcome the Examiner's objections and rejections. Early allowance of this application is therefore respectfully requested.

Respectfully submitted,

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